

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Shunpei Yamazaki, et al.
Serial No. : 10/072,496
Filed : February 5, 2002
Title : ELECTRONIC DEVICES

Art Unit : 2617
Examiner : Erika A. Gary
Conf. No. : 1207

Mail Stop Appeal Brief - Patents

Commissioner for Patents
P.O. Box 1450
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BRIEF ON APPEAL

(1) Real Party in Interest

Semiconductor Energy Laboratory Co., Ltd., the assignee of this application, is the real party in interest.

(2) Related Appeals and Interferences

There are no related appeals or interferences.

(3) Status of Claims

Claims 1, 2, 4-26 and 97-108 are currently pending with claims 1, 15 and 21 being independent. Claims 1, 2, 4-26 and 97-108 have been rejected, and the rejections of all of these claims are appealed.

(4) Status of Amendments

The claims have not been amended subsequent to the final rejection of May 8, 2008.

(5) Summary of Claimed Subject Matter

In the discussion below, reference numerals and references to particular portions of the specification are inserted for illustrative purposes only and are not meant to limit the scope of the claims.

Referring to FIGS. 1A-1F, independent claim 1 is directed to an electronic device that includes a first housing coupled to a second housing by a hinge 100. See the text at page 4, line

14 to page 5, line 2. A first center line (CENTER LINE A) of the first housing and a second center line (CENTER LINE B) of the second housing are in parallel with each other only in a state where the first housing and the second housing are folded via the hinge (see FIGS. 1D and 1F and the text at page 5, lines 18-23), and are inclined relative to each other in a state where the first housing and the second housing are opened via the hinge (see FIGS. 1A and 1C and the text at page 5, lines 14-17). The second housing includes a transmitting unit 103 and the first housing includes a receiving unit 104. See the text at page 4, line 24 to page 5, line 2. The receiving unit 104 is provided at a first end of the first housing opposite a second end of the first housing at which the hinge 100 is located. See FIG. 1A.

Referring to FIGS. 1A-1F, independent claim 15 is directed to an electronic device that includes a first housing coupled to a second housing by a hinge 100. See the text at page 4, line 14 to page 5, line 2. Each of the first and second housings has a pair of lines opposing each other, one of the pair of lines of the first housing has a shorter length than the other one of the pair of lines of the first housing, and one of the pair of lines of the second housing has a shorter length than the other one of the pair of lines of the second housing. See FIG. 1A and the text at page 5, lines 2-4. The second housing includes a transmitting unit 103 while the first housing includes a receiving unit 104. See the text at page 4, line 24 to page 5, line 2. The receiving unit 104 is provided at a first end of the first housing opposite a second end of the first housing at which the hinge 100 is located. See FIG. 1A.

Referring to FIGS. 1A-1F, independent claim 21 is directed to an electronic device that includes a first housing coupled to a second housing by a hinge 100. See the text at page 4, line 14 to page 5, line 2. Each of the first and second housings has a trapezoid shape. See FIG. 1A and the text at page 5, lines 4-5. The second housing includes a transmitting unit 103 while the first housing includes a receiving unit 104. See the text at page 4, line 24 to page 5, line 2. The receiving unit 104 is provided at a first end of the first housing opposite a second end of the first housing at which the hinge 100 is located. See FIG. 1A.

(6) Grounds of Rejection to be Reviewed on Appeal

Claims 1, 2, 4-26 and 97-108 have been rejected as unpatentable over Edwards (U.S. Patent Publication Number 2002-0077160) in view of Suso (U.S. Patent Number 6,466,202).

(7) Argument

1. One of ordinary skill in the art would not have modified Edwards in view of Suso because doing so would have frustrated the purpose of Edwards.

As noted above, independent claim 1 is directed to an electronic device that includes a first housing coupled to a second housing by a hinge such that a first center line of the first housing and a second center line of the second housing are in parallel with each other only in a state where the first housing and the second housing are folded via the hinge. The first center line and the second center line are inclined relative to each other in a state where the first housing and the second housing are opened via the hinge. The second housing includes a transmitting unit while the first housing includes a receiving unit. The receiving unit is provided at a first end of the first housing opposite a second end of the first housing at which the hinge is located.

Independent claims 15 and 21 recite electronic devices having similar features. Rather than reciting features of the center lines of the housings, claim 15 recites that each of the first and second housings has a pair of lines opposing each other, that one of the pair of lines of the first housing has a shorter length than the other one of the pair of lines of the first housing, and that one of the pair of lines of the second housing has a shorter length than the other one of the pair of lines of the second housing, and claim 21 recites that each of the first and second housings has a trapezoid shape.

Edwards describes a satellite phone having a cover (which is said to correspond to the first housing) coupled to a body (which is said to correspond to the second housing) by a hinge such that the center lines of the cover and the body are arranged in the manner recited in claim 1. However, Edwards does not describe or suggest putting a receiving unit in the cover at all, let alone at a first end opposite a second end at which the hinge is located.

Recognizing this failure of Edwards, the Examiner argues that it would have been obvious to modify Edwards in view of Suso, which shows transmitting and receiving units arranged in first and second housings. Appellants disagree because doing so would have

frustrated the purpose of the arrangement described by Edwards. In particular, Edwards states in paragraph [0020] that “the antenna of certain handheld devices, such as satellite phones, must extend above the user’s head” and that the “cover 24 operates as an extender for antenna 21” and “extends beyond the user’s ear so that it provides the highest possible antenna base without requiring an antenna extension or the like.” Thus, Edwards indicates that it is important to maximize the distance that the antenna extends from the components with which it operates, which would weigh against moving components to the cover of Edwards. Moreover, in order to maintain a consistent distance between the microphone and the speaker (which the rejection equates with the transmitting and receiving units), the size of the device of Edwards would need to be reduced if the microphone or speaker were moved to the cover, and this, in turn, would lower the antenna base, which is contrary to the purpose of Edwards.

In addition, even if one were to put a receiving unit in the cover of Edwards, given Edwards’ stated purpose to have the cover operate as an extender for the antenna, nothing in Edwards or Suso would have led to the placement of the receiving unit at a first end of the cover opposite a second end at which the hinge is located. Such placement would result in the first end of the cover being at the user’s ear, and the second end of the cover being between the user’s ear and the user’s mouth, such that the cover could in no way serve as an extender for the antenna.

Accordingly, for at least this reason, the rejection should be reversed.

2. One of ordinary skill in the art would not have had any reason to modify Suso in view of Edwards in a way that results in the claimed subject matter.

During an interview conducted on October 1, 2008, the Examiner indicated possible agreement that one of ordinary skill in the art would not have modified Edwards in view of Suso, but then argued that the rejection could be changed so as to modify Suso in view of Edwards in order to arrive at the claimed subject matter. Appellants disagree that such a combination would be proper.

In particular, as discussed above, the purpose of the configuration described by Edwards is to provide a cover that “extends beyond the user’s ear so that it provides the highest possible antenna base without requiring an antenna extension or the like.” (See Edwards at paragraph [0024].) Thus, to the extent that one of ordinary skill in the art would have modified Suso in

view of Edwards, they would have, at best, done so by placing the speaker near the hinge such that the cover would extend beyond the user's ear and provide a high antenna base. Accordingly, the resulting combination would not have had a receiving unit provided at a first end of the first housing opposite a second end of the first housing at which the hinge is located, as recited in each of the independent claims.

Accordingly, for at least the reasons presented above, the rejections based on Edwards and Suso should be reversed.

The appeal brief fee in the amount of \$540 was paid in advance on October 8, 2008 by way of deposit account authorization. A fee in the amount of \$130 for a one-month extension of time is being paid concurrently herewith on the electronic filing system (EFS) by way of deposit account authorization. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 6/15/09

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Appendix of Claims

1. (Previously Presented) An electronic device comprising:
a first housing;
a second housing;
a hinge,
wherein the first and second housings are coupled together by the hinge,
wherein a first center line of the first housing and a second center line of the second housing are in parallel with each other only in a state where the first housing and the second housing are folded via the hinge,
wherein the first center line and the second center line are inclined relative to each other in a state where the first housing and the second housing are opened via the hinge,
wherein the second housing includes a transmitting unit while the first housing includes a receiving unit, and
wherein the receiving unit is provided at a first end of the first housing opposite a second end of the first housing at which the hinge is located.
2. (Original) A device according to claim 1, wherein a first surface of the first housing and a second surface of the second housing oppose each other.
3. (Canceled)
4. (Original) A device according to claim 1, wherein one of the first and second housing includes display unit while the other of the first and second housing includes an operation key.
5. (Original) A device according to claim 1, wherein the first and second housing are connected in a direction selected from the group consisting of a vertical direction and a lateral direction.
6. (Original) A device according to claim 4, wherein a symbol displayed on the display unit is changed according to a direction of the electronic device.

7. (Original) A device according to claim 4, wherein the operation key includes at least a translucent button and a display portion formed under the translucent button.

8. (Original) A device according to claim 4, wherein the display unit includes one selected from the group consisting of a liquid crystal display device and a light emitting device.

9. (Original) A device according to claim 4, wherein a symbol including at least one selected from the group consisting of a letter, a character, an alphabet, a numeral and a pictograph is displayed on the display unit.

10. (Original) A device according to claim 4, wherein a picture is displayed on the display unit.

11. (Original) A device according to claim 8, wherein a photoelectric conversion element is formed in the one selected from the group consisting of the liquid crystal display device and the light emitting device.

12. (Original) A device according to claim 1, wherein the electronic device is an information terminal.

13. (Original) A device according to claim 1, wherein the electronic device is a cellular phone.

14. (Original) A device according to claim 1, wherein the electronic device is a PDA (personal digital assistant).

15. (Previously Presented) An electronic device comprising:
- a first housing;
 - ⊗ a second housing;

a hinge,
wherein the first and second housings are coupled together by the hinge,
wherein each of the first and second housings has a pair of lines opposing each other,
wherein one of the pair of lines of the first housing has a shorter length than the other one
of the pair of lines of the first housing,
wherein one of the pair of lines of the second housing has a shorter length than the other
one of the pair of lines of the second housing,
wherein the second housing includes a transmitting unit while the first housing includes a
receiving unit, and
wherein the receiving unit is provided at a first end of the first housing opposite a second
end of the first housing at which the hinge is located.

16. (Original) A device according to claim 15,
wherein at least one of the first and second housing includes a display unit,
wherein the display unit includes one selected from the group consisting of a liquid
crystal display device and a light emitting device.

17. (Original) A device according to claim 16, wherein a photoelectric conversion
element is formed in the one selected from the group consisting of the liquid crystal display
device and the light emitting device.

18. (Original) A device according to claim 15, wherein the electronic device is an
information terminal.

19. (Original) A device according to claim 15, wherein the electronic device is a cellular
phone.

20. (Original) A device according to claim 15, wherein the electronic device is a PDA
(personal digital assistant).

21. (Previously Presented) An electronic device comprising:
a first housing;
a second housing;
a hinge,
wherein the first and second housings are coupled together by the hinge,
wherein each of the first and second housings has a trapezoid shape,
wherein the second housing includes a transmitting unit while the first housing includes a receiving unit, and
wherein the receiving unit is provided at a first end of the first housing opposite a second end of the first housing at which the hinge is located.

22. (Original) A device according to claim 21,
wherein at least one of the first and second housing includes a display unit,
wherein the display unit includes one selected from the group consisting of a liquid crystal display device and a light emitting device.

23. (Original) A device according to claim 22, wherein a photoelectric conversion element is formed in the one selected from the group consisting of the liquid crystal display device and the light emitting device.

24. (Original) A device according to claim 21, wherein the electronic device is an information terminal.

25. (Original) A device according to claim 21, wherein the electronic device is a cellular phone.

26. (Original) A device according to claim 21, wherein the electronic device is a PDA (personal digital assistant).

27-96. (Canceled)

97. (Previously Presented) A device according to claim 1,
wherein the operation key includes a plurality of translucent buttons and unit displays,
wherein each of the unit displays is formed under each of the translucent button.

98. (Previously Presented) A device according to claim 15,
wherein the operation key includes a plurality of translucent buttons and unit displays,
wherein each of the unit displays is formed under each of the translucent button.

99. (Previously Presented) A device according to claim 21,
wherein the operation key includes a plurality of translucent buttons and unit displays,
wherein each of the unit displays is formed under each of the translucent button.

100. (Previously Presented) A device according to claim 1,
wherein the second housing includes a display unit and the first housing includes an
operation key,
wherein the second housing including the display unit includes a light emitting device.

101. (Previously Presented) A device according to claim 15,
wherein the second housing includes a display unit and the first housing includes an
operation key,
wherein the second housing including the display unit includes a light emitting device.

102. (Previously Presented) A device according to claim 21,
wherein the second housing includes a display unit and the first housing includes an
operation key,
wherein the second housing including the display unit includes a light emitting device.

103. (Previously Presented) A device according to claim 1, further comprising an
operation key included in the first housing.

104. (Previously Presented) A device according to claim 15, further comprising an operation key included in the first housing.

105. (Previously Presented) A device according to claim 21, further comprising an operation key included in the first housing.

106. (Previously Presented) A device according to claim 1, further comprising an operation key included in the first housing between the receiving unit and the hinge.

107. (Previously Presented) A device according to claim 15, further comprising an operation key included in the first housing between the receiving unit and the hinge.

108. (Previously Presented) A device according to claim 21, further comprising an operation key included in the first housing between the receiving unit and the hinge.

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Evidence Appendix

NONE

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Related Proceedings Appendix

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